

Natural History



The Book of the American Woodcock

William G. Sheldon

With its striped head, shoebottom eyes, and great long bill, the American Woodcock has for years both baffled and fascinated ornithologists, naturalists, and sportspersons alike. Once a shorebird, the woodcock adapted itself centuries ago to inland fields and forests, and today ranges over the eastern United States and Canada. Yet few Americans have ever seen one, and, until recently, little was known about this curious, elusive creature.

The result of fifteen years of field work and research, William G. Sheldon's *The Book of the American Woodcock* presents one of the most thorough studies of this bird. By trapping woodcocks on their breeding grounds, Sheldon was able to gather wholly original data on these birds, including their unique courtship practices, feeding habits, and migratory patterns. In addition, he has compiled information from a variety of other biological and historical sources, making his book one of the most definitive on woodcocks.

The text is illustrated with photographs, watercolors, and etchings. Four appendices provide charts and tabular data on migration, band recovery, growth and weight, population composition, and yearly life cycle.

"Sheldon as hunter, ecologist and zoologist has spent years studying woodcocks, hence is well qualified to write about them....The photographs are excellent, the drawings and diagrams clear....The book as a whole should prove useful in the undergraduate library in biology, sociology, and related areas"—*Choice*.



"Both the casual nature buff and serious students of wildlife management will find much of interest in this carefully-documented, well-written monograph of the elusive American woodcock. Well worth inclusion in any naturalist's library, amateur as well as professional"—*SFI (Sport Fishing Institute) Bulletin*.

Former Leader of the Massachusetts Cooperative Wildlife Research Unit at the University of Massachusetts, William G. Sheldon has conducted many field studies of animal life.

250 pp., illustrated, bibliography, index
cloth \$12.50
LC 67-11243, ISBN 021-2
1967

The Wilderness Home of the Giant Panda

William G. Sheldon

In 1934, an expedition sponsored by the American Museum of Natural History departed for Szechwan Province in Western China, the principal habitat of the giant panda. The objective was to study the habitat and behavior of this fascinating animal and to collect representative specimens of birds and of other animals. As a member of this expedition, William G. Sheldon is one of the few Western scientists to have observed the giant panda in its natural environment.

"Sheldon's book...is unlike most volumes about unusual places. It is based upon the author's day-to-day journal, a technique that ensures the accuracy important in descriptions of such remote areas. The author is a true naturalist and not a professional traveller or popular writer. What promises to be an accurate but dull account of a trip to a little known area that is of great biological interest turns out to be anything but dull. In fact, the simple, direct writing makes for compelling reading. The book is illustrated with drawings and photographs; a bibliography and an index are included. Reading this book should stir ambition in the young to explore the area and make the old wish they could. Of interest both to the biologist and to the general reading public"—*Choice*.

"Current interest in the panda as an endangered species plus the fact that few, if any, Westerners have penetrated that remote area since World War II have prompted the author to publish his field journal. It is a good travel yarn, filled with adventure, strenuous activity, hardship and the excitement of discovery. ...It is the first detailed description of the panda's habitat and valuable on that score alone"—*Publishers Weekly*.

"The author is a sensitive, well trained, keenly observant wildlife biologist.... He details the geologic background of the area, landscape, fauna and flora as well as the adventures en route. Collections of animals, records of plant and animal distribution (lists and ecology of life zones in appendix) and notes on the appearance, possible origins, living conditions and survival habits of the mountain people are displayed through the book....Not only 'Orientalists,' but all concerned with the interrelations among landscape, plants, animals and [people] should have Sheldon's book in their personal library"—*Journal of the American Oriental Society*.

226 pp., illustrated, cloth \$12.50
LC 74-21245, ISBN 179-0
1975

Legion of Night: The Underwing Moths

Theodore D. Sargent

"Sargent is former editor of the *Journal of the Lepidopterists' Society*, professor in the department of zoology at the University of Massachusetts, and an expert on the *Catocala*, the underwing moths. All of this is evident throughout this book. He writes with subtle humor, includes pertinent quotations from literature and the Bible, and provides a great deal of relevant background information. Throughout the book, the author's knowledge of and love for his subject matter are evident and contagious....The complete survey of the underwing moths of the eastern U.S., the summary of information about each moth...and the discussion of current research using these moths, as well as a glossary, complete index, and extensive and current bibliography make this book very desirable for both high school and college use"—*Choice*.

"Included in the present volume are an illustrated identification guide that gives common and scientific names, similar species, description, range, status, season, larval food, and notes on behavior of the Eastern underwings; historical notes,... advice on collecting, especially on the use of baits and traps; and a highly readable summary of some aspects of Sargent's research, notably on wing patterns and functions. A wealth of technical data in the form of tables and appendixes will be valued by professional researchers. The bibliography is both extensive and exhaustive. A fine book for serious amateur and professional entomologists"—*Library Journal*.

"The book is copiously illustrated with photographs and drawings, including a series of colored plates of the species which must be invaluable to anyone wanting to identify them. The last two chapters review the experimental work on the adaptive value of color and pattern, behavior, and diversity in the group, on which Sargent is the established expert....To those who enjoy animals and the process of finding out about them the book may be recommended as a lively account of a fascinating group of moths"—Laurence M. Cook, Zoology, University of Manchester, *The Quarterly Review of Biology*.

224 pp., color plates, black-and-white photographs, line drawings
cloth \$15
LC 75-8452, ISBN 187-1
1976

Hormone Action in the Whole Life of Plants

Kenneth V. Thimann

In its 1979 award citation for this book, the New York Botanical Garden wrote: "The scientific career of Kenneth Thimann has coincided almost exactly with the development of the study of plant hormones and he and his students have contributed substantially to many aspects of that development. This book, which is based on a series of [1974] lectures given at the University of Massachusetts, is a valuable and highly personal narrative in which historical, anecdotal and experimental information are skillfully blended with literary grace and skill. No book published in the last ten years has so suc-

cessfully integrated the vast and complex literature of this field."

"The first overall presentation of hormones in plants—beginning with the germination of the seed and continuing through the growth and development of the plant in all stages to the formation of the seed again....This is an excellent book that contains a great deal of information based on experimental work. It is well written and highly readable.... Many diagrams, tables, and charts as well as some photographs are included. A bibliography is given at the end of each chap-



ter, and a list of supplementary readings is given at the end of the volume. Should definitely be considered as a reference text for upper-division undergraduates”

Choice.

“Probably no more qualified author could be selected to summarize in a single volume the present state of knowledge regarding hormonal regulation of plant growth and development. Kenneth Thimann's credentials include more than 40 years of contributions to hormonal physiology, a field which he has helped pioneer, seemingly countless publications, and a long roster of students and colleagues who now represent the leadership of this field”—Cary A. Mitchell, *Hortscience*.

“No book produced in the last ten years has so successfully integrated the vast and complex literature of this field. The author and the University of Massachusetts deserve congratulations for the excellence of the product of their collaboration”—Arthur W. Galston, *Science*.

390 pp., illustrated, cloth \$35
LC 76-26641, ISBN 224-X
1977

The Growing Tree

B. F. Wilson

This innovative study of how a tree grows is intended for nature lovers, from the owner or observer of trees to the professional forester or student of botany. In presenting the complicated subject of tree growth, B. F. Wilson describes the structural characteristics that differentiate trees from other plant forms, the basic systems of tree growth and their regulation, and the interaction

of various parts of the tree in their competition for photosynthetic products.

“There has long been a need for a book which provides beginning forestry students with information on the form and growth of trees. Such a book is *The Growing Tree...* which should be owned by every practicing forestry student.... Foresters who graduated several years ago will find much in this book that is new to them”—*The Forestry Chronicle*.

“A fairly elementary, simply written, and thorough survey of the life history of trees, by a competent authority on plant physiology. Some of the material can be found in botany and wood technology texts, but certainly not as thorough or as well done.... An excellent text for forestry students as well as those in biology who have an urge to be better informed about trees and a very fine book for the interested lay reader. Good index; useful chapter notes”—*Choice*.

“His style is succinct and lucid, particularly in difficult sections on the cambium and apical dominance. Students, gardeners, and environmentalists will welcome this volume as one that is accurate and easy to read. As such, it deserves inclusion in high school, public, and college libraries”—*Library Journal*.

B. F. Wilson received his Ph.D. from the Forestry School at the University of California, Berkeley. He is Professor of Forestry at the University of Massachusetts.

164 pp., charts, tables, line drawings
cloth \$10, paper \$5.95
LC 70-123535, ISBN (cloth) 067-0,
(paper) 075-1 1971

In the Presence of Nature

David Scofield Wilson

Introduction by Gene Wise

"This perceptive interdisciplinary volume examines the 18th-century phenomenon Wilson terms 'nature reporters,' those early gatherers and transmitters of scientific data from the New World. In particular, Wilson examines the literary, artistic, and scientific contributions of Jonathan Carver, John Bartram, and Mark Catesby. This approach provides a broad perspective on their work, and avoids the limitations inherent in examining any single discipline by itself. Wilson's book will interest students as well as general readers with interests in this period of American history"—*Library Journal*.

"In the Presence of Nature is the most intensely crafted book I know of those associated with the American Studies movement. Wilson wastes hardly a word in this volume; it is as carefully formed as it is carefully researched. Wherever the reader looks, there is evidence of

the author's mind"—Gene Wise, American Studies, University of Maryland.

"It would seem evident that few writers could bring to their work competence in so many disciplines. Wilson can, and does so impressively. His particular interest is not in the early reporters of the seventeenth century who came to America from Europe but with those of the eighteenth century, some of whom were born here....American Culture Studies is a comparatively new approach in academic research and teaching. This book is a fine contribution to the literature of the subject"—*Isis*.

David Scofield Wilson is Associate Professor and Chairperson of American Studies at the University of California, Davis.

240 pp., illustrated, cloth \$15
LC 77-90733, ISBN 020-4 1978





Trees, Shrubs, and Vines for Attracting Birds A Manual for the Northeast

Richard M. DeGraaf & Gretchin M. Witman
Drawings by Abigail Rorer

"Over 160 species of plants are attractive to birdlife in the Northeast. [DeGraaf and Witman] have sorted them out and assembled their assets....Any landscape planner who is aware of the need for diverse habitats to attract wildlife can follow their recommendations. Others can read and learn since careful choice of favorite food and shelter plants contributes immensely to the quality of our environment"—*The New York Times*.

"Although intended primarily for the northeastern states, the descriptions of plants, and the birds that are attracted to them, are applicable to suggested garden plantings throughout a much wider portion of the United States. In addition to a good description of each plant and its outstanding landscape features, good information is given on cultivation and propagation. A table of bird visitors for each plant lists those portions of the plant used for food (where applicable), as well as whether or not the plant is used for cover or nesting by each bird species. This well-written book provides a means of selecting landscape material which can make your garden attractive for its bird visitors as well as for its plantings. Strongly recommended for the more imaginative homeowner"—*American Horticulturist*.

This illustrated manual provides homeowners, as well as landscape architects and other professionals, with a wealth of information useful for creating bird habitats. Included are lists of plants that tolerate salt, those that thrive in

sandy, dry soils, and those that withstand city conditions. For gardeners who prefer an alternative to purchasing stock at nurseries, the authors describe the best methods of propagation. A map showing hardiness zones is included, along with charts of the flowering and fruiting times of shrubs, vines, and trees. Over seventy-five line drawings complement the text.

Richard M. DeGraaf is a Research Wildlife Biologist with the United States Department of Agriculture in Amherst, Massachusetts. Gretchin M. Witman is a Research Associate at the University of Massachusetts, Amherst. Abigail Rorer lives in Petersham, Massachusetts, and has exhibited her work in numerous galleries.

208 pp., illustrated, cloth \$12.50
LC 78-19698, ISBN 266-5
1979





Flowering Plants of Massachusetts

Vernon Ahmadjian

Drawings by Barry Moser

This beautifully illustrated guide enables the reader to identify and study in some depth the wide variety of flowering plants common to Massachusetts and its neighboring regions. The book describes nearly five hundred different plants, including trees, shrubs, and the more common and conspicuous wildflowers. Plants are grouped according to family, with each family briefly described and at least one of its common Massachusetts species presented in detail. Each entry provides the plant's common and Latin names, approximate height, flowering time, usual habitat, and distinctive botanical characteristics. A glossary of major botanical terms and a list of additional references are included with the text.

The book is illustrated with over two hundred and fifty line drawings by Barry Moser. To identify unknown plants, the reader may either match the plant in question with one of the illustrations, or turn to the key which precedes the text. This key presents the reader with a series of choices based on plant characteristics; each choice leads to further choices until identification of family is established.

Flowering Plants of Massachusetts is specifically designed to bridge the gap between simple guides and professional manuals, and will be especially useful to knowledgeable amateur botanists.

Vernon Ahmadjian received his B.A. and M.A. degrees from Clark University, and his Ph.D. from Harvard University. He is Professor of Botany at Clark, where he has taught courses on flowering plants for the past fifteen years.

Barry Moser is Printmaker and Instructor of Graphic Arts and Art History at The Williston-Northampton School. A well-known artist, his work has been exhibited widely and appears in major public and private collections in this country and abroad.

608 pp., illustrated, cloth \$12.95

LC 78-19690, ISBN 265-7

1979

Native and Naturalized Plants of Nantucket

Frank C. MacKeever

Edited by Harry E. Ahles

Nantucket Island, which lies just off the coast of Massachusetts, offers a fascinating laboratory for students of insular flora. On this small island grow plants that have evolved differently from their general species, that have reached their northern limits, or that are unique to New England. Over a nine-year period, Frank C. MacKeever—who for eighteen years was chief custodian of the herbarium at the New York Botanical Garden—made numerous trips to Nantucket to collect flora specimens. Much of his work consisted of depositing nearly two thousand voucher specimens in herbaria, evaluating their names (which appeared in synonymy), and assigning the present-day nomenclature. He had almost completed his work at the time of his death in 1967.

This book is a catalogue of Nantucket plant species, arranged in alphabetical order according to family. Represented here are 526 species, as well as 610 taxa, including varieties, forms, and hybrids. For each taxon, MacKeever provides the common name, synonyms, native home, flowering period, references, and mention in previous books. The book includes a statistical table and a genus synonymy of Nantucket flora.

Harry E. Ahles, curator of the herbarium at the University of Massachusetts, prepared MacKeever's manuscript for publication and contributed a foreword and an index.

160 pp., cloth \$7.50
LC 68-19673, ISBN 037-9
1968



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